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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/463,096	04/12/2000	HANS TANDLER	GK-ZEI-3078	5855

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EXAMINER

WINSTEDT, JENNIFER E

ART UNIT PAPER NUMBER

2872

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/463,096

Applicant(s)

TANDLER ET AL.

Examiner

Jennifer E Winstedt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13, 14, 17, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (U.S. Patent 4,161,756) in view of Uemura et al. (U.S. Patent 6,046,770).

Regarding claims 13 and 17, Thomas discloses an arrangement for directly controlling the movement of a zoom system comprising direct driving motors for at least one lens system (1, 5, 2, 6, 17, 27, Figure 1) wherein the driving motors are controlled by a control unit which reads calculated pre-stored values of reference points from a mathematical controlling curve for directing the movement of the at least one moving lens system by controlling the driving motors in a corresponding manner without necessitating use of mechanical generation of the mathematical controlling curve (column 1, lines 24-27 and column 2, lines 5-12; the nonlinear law of relative displacement is the mathematical controlling curve). Thomas does not disclose linear drives being controlled without using an additional monitoring system, i.e. a position encoder or sensor. Uemura et al. discloses a control unit which controls linear drives without an additional monitoring system, or in an open loop (column 3, lines 34-42; stepping motors are linear drives). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the control unit of Thomas control linear drives without an

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additional monitoring system as Uemura et al. suggests in order to reduce the number of elements making up the driving motors (since any additional monitoring systems are usually part of the driving motors) and thus reduce the cost of production.

Regarding claims 14 and 21, Thomas in view of Uemura et al. discloses that two lens members are controlled independently from one another (column 2, lines 55-57; Thomas).

Regarding claim 23, the combination discloses a control unit used for motorized zoom adjustment and for motorized focusing (column 2, lines 50-57; Thomas). The combination does not disclose more than one control unit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have more than one control unit, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Co. v. Bemis Co.*, 193 USPQ 8.

3. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Uemura et al. as applied to claims 13, 14, 17, 21, and 23 above, and further in view of Official Notice.

Regarding claim 18, Thomas in view of Uemura et al. discloses the claimed invention as described above except for the linear drives being arranged in the device housing. Official Notice is taken that having linear drives be arranged in a device housing is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the linear drives of Thomas in view of Uemura et al. be located in the device housing in order to make the overall device more compact.

Regarding claim 19, the combination discloses that the driving motors are arranged between lens pairs (driving motor 27 is between lens pair 17 and lens pair 1; driving motors 5 and 6 are between lens pair 1 and lens pair 18 of Figure 1; Thomas).

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Uemura et al. as applied to claims 13, 14, 17, 21, and 23 above, and further in view of Pensel et al. (U.S. Patent 5,867,308).

Regarding claim 22, Thomas in view of Uemura et al. discloses the claimed invention as described above except for a linear magnification that is adjusted being determined and displayed to the operator during the controlling of the zoom system. Pensel et al. discloses a linear magnification that is adjusted being determined and displayed to the operator during the controlling of the zoom system (12, Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a linear magnification of Thomas in view of Uemura et al. that is adjusted be determined and displayed to the operator during the controlling of the zoom system as Pensel et al. suggests in order to allow the operator to arrive at a desired magnification with ease.

5. Claims 13, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biber et al. (U.S. Patent 5,825,535) in view of Thomas and Uemura et al.

Regarding claims 13, 15, and 20, Biber et al. discloses an arrangement for directly controlling the movement of a zoom system in a stereo microscope comprising direct driving motors for at least one moving lens system (8, 9, Figures 1 and 2 and column 3, line 66 – column 4, line 12); wherein the lens members are provided as lens pairs in a Greenough type stereo microscope or a telescope type stereo microscope (column 1, lines 54-55; a telescope type stereo

microscope) and wherein a plurality of moving lens members are controlled jointly (column 4, lines 6-9; when the individual optical elements are displaced along the optical axis simultaneously, the optical elements are being controlled jointly). Biber et al. does not disclose the driving motors being controlled by a control unit which reads calculated pre-stored values of reference points from a mathematical controlling curve for directing the movement of the at least one moving lens system by controlling the driving motors in a corresponding manner without necessitating use of mechanical generation of the mathematical controlling curve and without an additional monitoring system (i.e. a position encoder or sensor). Thomas discloses a driving motors (5, 6, 27, Figure 1) that are controlled by a control unit which reads calculated pre-stored values of reference points from a mathematical controlling curve for directing the movement of at least one moving lens system by controlling the driving motors in a corresponding manner without necessitating use of mechanical generation of the mathematical controlling curve (column 1, lines 24-27 and column 2, lines 5-12; the nonlinear law of relative displacement is the mathematical controlling curve). Uemura et al. discloses a control unit which controls drives without an additional monitoring system, or in an open loop (column 3, lines 34-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the drives of Biber et al. be controlled by a control unit which reads calculated pre-stored values of reference points from a mathematical controlling curve for directing the movement of at least one moving lens system by controlling the driving motors in a corresponding manner without necessitating use of mechanical generation of the mathematical controlling curve as Thomas suggests order to provide a simplified control system (column 1, line 65; Thomas). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have

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the control unit control the drives of Biber et al. without an additional monitoring system as Uemura et al. suggests in order to reduce the number of elements making up the driving motors (since any additional monitoring systems are usually part of the driving motors) and thus reduce the cost of production.

Response to Arguments

6. Applicant's arguments with respect to claims 13-15 and 17-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

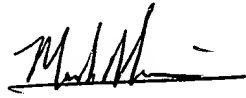
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E Winstedt whose telephone number is (703) 305-0577. The examiner can normally be reached on 8:30-18:00 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JW
May 29, 2002


MARK ROBINSON
PRIMARY EXAMINER
AU 2872